



## War and economy. Rediscovering the eighteenth-century military entrepreneur

Rafael Torres-Sánchez, Pepijn Brandon & Marjolein 't Hart

To cite this article: Rafael Torres-Sánchez, Pepijn Brandon & Marjolein 't Hart (2018) War and economy. Rediscovering the eighteenth-century military entrepreneur, *Business History*, 60:1, 4-22, DOI: [10.1080/00076791.2017.1379507](https://doi.org/10.1080/00076791.2017.1379507)

To link to this article: <http://dx.doi.org/10.1080/00076791.2017.1379507>



© 2017 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 11 Oct 2017.



Submit your article to this journal [↗](#)



Article views: 127



View related articles [↗](#)



View Crossmark data [↗](#)

## War and economy. Rediscovering the eighteenth-century military entrepreneur

Rafael Torres-Sánchez<sup>a</sup>, Pepijn Brandon<sup>b,c</sup> and Marjolein 't Hart<sup>b,d</sup>

<sup>a</sup>School of Economics and Business, Economic History, University of Navarra, Navarra, Spain; <sup>b</sup>Department of History, VU, Amsterdam, The Netherlands; <sup>c</sup>Research Department, International Institute of Social History, Huygens Institute for the History of the Netherlands, Amsterdam, The Netherlands; <sup>d</sup>Department of History, Huygens Institute for the History of the Netherlands, Amsterdam, The Netherlands

### ABSTRACT

The detrimental effects traditionally assigned to warfare in the development of pre-industrial economies have obscured the prominent role that military entrepreneurs played in economic development in this period. Historiography minimises the extent to which war and the concomitant strengthening of the central state provided a whole new range of opportunities for capital investment, a tendency that has been strengthened by the paradigm of Redlich's 'decline of the soldier-entrepreneur' and the technological determinism of the debate on the Military Revolution among others. The aim of this introduction is to look into the background of this relative lack of interest and to reaffirm the mutual dependence of eighteenth-century state-formation and the business of war.

### KEYWORDS

War; war-entrepreneur; logistics; army supplies; navy supplies; mobilisation of resources; state finances; war loans; state formation; eighteenth century; historiography; military revolution

Until the nineteenth century, states spent about two-thirds of their income on war. Whatever the particular political regime, no other activity or function loomed as large in the state's budget as the management of its armed forces and war fleets. The lion's share, therefore, of any nation's state revenue was channelled through its public-expenditure outlets towards the waging of war. This vast war expenditure set in motion enormous numbers of entrepreneurs. Military investment provided an inexhaustible source of business opportunities, comparable only to consumer-driven trade expansion. While the latter has attracted attention from generations of historians, examining how this expansion of trade generated new venues of capital investment, new entrepreneurs and new ways of doing business, the knock-on effects of war-related state expenditure have remained a much less attractive topic.<sup>1</sup> We do have a fairly accurate idea of the amount states spent on war and we can imagine the ripple effect through the economy. Yet we have only very inaccurate notions about the individual entrepreneurs who were the main benefactors of this transfer, and of the institutions that facilitated their economic activities.

Like economic historians more generally, traditional business historians tended to link the spread of capitalist enterprise to increases in competitively operating markets and the

**CONTACT** Pepijn Brandon  [p.brandon@vu.nl](mailto:p.brandon@vu.nl)

© 2017 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.  
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

emergence of 'open societies'. From this point of view, the business of war was viewed as a field of continuous disruption of markets by state intervention and as the favoured domain of rent-seeking rather than entrepreneurial behaviour.<sup>2</sup> More critically minded scholars pointed out the importance of the 'military-industrial complex' to the development of the twentieth-century US state and economy. Nevertheless, even they frequently treated military investment as a diversion from 'ordinary' forms of economic development, leading to monopoly practices and constituting economic waste.<sup>3</sup> Recently however, new strands in business history have turned away from this normative approach, instead locating 'businesses and related organizations, individuals, and practices as integral elements in the moving landscape of capitalist development, crisis, and reorientation'.<sup>4</sup> This has led to at least a partial re-evaluation of the relationship between war, state intervention and business development, leading away from the all too simple generalisation that 'when war broke out, markets broke down'.<sup>5</sup> Scranton and Fridenson point out the many ways in which both particular businesses and business in general could be affected by warfare, from technological innovation to logistics, and from the impact of war on labour markets to the use of military intelligence for economic purposes.<sup>6</sup> This opens the way for ambitious research programmes on the long-term impact of war on the development of capitalist business practices, positive or negative, as well as on the effects of transitions between war- and peace-time economies. Recently, business historians have employed such questions to broaden our understanding of the economic consequences of the American Civil War and the Second World War.<sup>7</sup> But the dominance of an older narrative that presupposes the opposition between states and markets has proven very strong for the early-modern period, when war between major states was practically permanent and military entrepreneurship thrived. As the contributions to this special issue show, studying this period can provide important new insights into the ways in which state-formation, capitalist development and the development of business practices interlocked.

It is ironic that the picture of the war-entrepreneur is murkiest in the eighteenth century, the century in which for key European states military and naval spending increased most. Our aim in this introduction is to come up with an answer to the question of why eighteenth-century war-entrepreneurs have remained understudied despite the sheer importance of war-related markets in terms of GDP. We will argue for the need to go beyond the narrow focus in the literature on the early-modern business of war on one particular type of military entrepreneur, the 'enterpriser-colonel' who supplied soldiers on his own account. The organisation of warfare involved a vast array of businesses, including large- and small-scale arms producers, suppliers of the army and the navy, contractors and subcontractors involved in the building of warships or fortresses, international banking houses and petty traders who followed the trail of armies. The contributions of the authors in this special issue all start from such broader conceptions regarding the eighteenth-century military entrepreneur. On this basis, we will provide an alternative to the persistent narrative that casts the eighteenth century as a period of gradual replacement of military entrepreneurs by increasingly effective states. Instead, we will emphasise the continued co-dependence of states and military entrepreneurs throughout the eighteenth century – a co-dependence that in different forms continued to shape both processes of state formation and market development in the various national cases examined in this special issue.

### **Hiding the military entrepreneur: states versus markets?**

Several prominent debates in historiography since the 1970s have ended up obscuring the role of the military entrepreneur. This is especially true for the long debate on the role of

warfare in the construction of increasingly bureaucratised and interventionist states, which relies heavily on the idea that states by the turn of the eighteenth century were largely successful in reducing the control of private actors over military resources. As a result, some of the best historical references to military entrepreneurs are found in a much older literature, such as Namier's work on the English military contractor Anthony Bacon published in 1929.<sup>8</sup> Overall, it is remarkable that articles and monographs on specific military entrepreneurs are still so thin on the ground. Fritz Redlich's study from the late 1940s of seventeenth-century military enterprisers is still the essential yardstick for understanding 'the' military entrepreneur.<sup>9</sup> The newer literature on early modern warfare and state formation tended to focus on the cumulative mobilisation of armed forces and the subsequent degree of administrative expansion achieved by the central state, and assumed that this process entailed the wholesale rejection of medieval or feudal arrangements based on the participation of local or regional elite groups, urban institutions such as guilds or military entrepreneurs. According to this model, nationalising the armed forces and setting them up on a more professional basis in turn called for growing administrative control and greater fiscal and financial powers at the central level.<sup>10</sup>

Only very recently has this rather one-dimensional picture of the process of state formation been challenged.<sup>11</sup> This challenge flows from a large number of works studying the continued weight of market forces in military supply during the eighteenth century.<sup>12</sup> The practice of outsourcing in the management of eighteenth-century warfare was of such overbearing influence on the functioning of state bureaucracy that historians have coined the term 'contractor state' to better understand this reliance.<sup>13</sup> A central question thrown up by this growing literature is whether the process of state formation necessarily occurred at the expense of non-state institutions and entrepreneurs. In the mid-eighteenth century, the government of the Austrian Netherlands argued that the main reason for continuing with privatised military supply was precisely 'to lighten the workload of the government'.<sup>14</sup> Paying too much attention on the growing administrative capacities of the state might blind us to the benefits accruing to the state from the close cooperation with capitalist elites. Moreover, such cooperation could serve more than one purpose. For example, the participation of Scottish businessmen in the British state's military supply business was, among other things, a political instrument. Apart from providing the state with goods necessary for its warring activities, it also helped to ease tensions with Scotland and build up loyalty to the British state amongst its elites.<sup>15</sup> In their turn, for the Scottish elites investment and practical involvement in the business of war was a way of demonstrating their adherence to the monarchy and thereby building up a favourable overall business climate.<sup>16</sup> For the state, using these entrepreneurs was thus a way of procuring the supplies it needed and at the same time an efficient way of extending its authority.<sup>17</sup>

The example shows how cooperation with military entrepreneurs could act as a means of enlarging the state's influence, rather than just being a sign of the state's lack of administrative capacities. The profit and chances of upward social mobility offered by the extensive military supply business were in themselves attractive enough to lure in certain elites and fortify their position. They could equally help the state to build up a purview of national authority.<sup>18</sup> The important point for our purpose here is that the state benefited from the competition among business elites to participate with the state and its institutions. One of the factors favouring Philip V's triumph in the War of the Spanish Succession (1702–1713), for example, was his ability to profit from emerging networks in the military supply business

focussed on the North of Spain. These new Spanish entrepreneurs soon came to oust the influential group of French suppliers who had previously held central stage, leading to a 'nationalisation' of the military supply business. Under the traditional interpretation of the relation between state formation and elites, Philip V's decision to award military contracts to private Spanish entrepreneurs could be construed as a 'relinquishment' of state power to a business elite. In fact, it helped to consolidate and legitimise the authority of a monarch whose political position had been internationally questioned. After this shift, the monarchy was backed up by a powerful business clique, and military supplies constituted a business of mainly Spanish entrepreneurs. In this case, the consolidation of state power was perfectly compatible with new business opportunities for a regional elite, with the entrepreneurs playing a crucial role in knitting together the state's national and colonial areas of influence and authority.<sup>19</sup> In the light of such examples, the tendency in the literature to associate state centralisation automatically with a diminishing role for military entrepreneurs needs serious revision. In many cases the strengthening of the eighteenth-century central states depended on and further extended the involvement of capitalist elites in the business of war.

### Technological determinism and the Military Revolution debate

The belief that war singularly worked towards centralisation of the state at the cost of the military entrepreneur was greatly strengthened by the Military Revolution debate. Successive generations of historians have squabbled over which military-technological breakthrough has had the greatest influence on tactical and administrative needs in state development since the Middle Ages. Historians have advocated candidates as diverse as the introduction of gunpowder, new style fortifications, artillery, the musket, pike, bayonet, pre-packaged cartridge or ship of the line.<sup>20</sup> All these suggestions suffer from a high level of technological determinism. Perhaps even more importantly, the majority of specialists who have reflected on the Military Revolution concluded that only the state and its administrative machinery for control could cope with the challenge of implementing and maintaining increasingly complex and costly changes in military technology. According to this line of reasoning, the change in military technology could never come from small producers, guilds or local institutions; the military entrepreneur played no key part.<sup>21</sup>

However, newer research shows how the technological changes in warfare did not limit the role of private producers, but greatly enhanced it. Take the example of one particular change in military technology that is sometimes held up as the quintessence of the Military Revolution: the ship of the line. The country that built most warships in the eighteenth century, Great Britain, did so mainly with the support of merchant yards. As Roger Morriss concludes: 'It is a cliché, often repeated, that the state's dockyards were the largest industrial organisation in Britain. But all the materials they used were provided by merchant contractors and an increasing number of naval vessels were built and repaired in merchant shipyards. The private sector thus underpinned the state's resources.'<sup>22</sup> Many technical changes fuelled by the constant clashes between European war navies were taken on and implemented by these merchant shipyards working in the service of the navy. If English businessmen participated in this technology race, this was because, first and foremost, the state was relatively reliable in honouring its contractual commitments and, second, because it was a stable client that rounded out and complemented these entrepreneurs' businesses with private trading clients.

The role played by the technological factor in state development is better understood by switching the focus from technical novelties to their impact on the relations between state and entrepreneurs. In fact, we are now beginning to realise the extent to which entrepreneurs participated in changing military technology and even acted as the main implementors of the innovations sought by the state. Take the example of another hallmark military product of the Military Revolution: artillery. When the French state decided to renew the production methods in its gun foundries in the mid-eighteenth century, it ran into a serious hitch because of the lack of foundries capable of coping with the technical innovations developed by the Swiss ironmaster Jean Maritz. The state's problem here was organisational rather than technological. As David Plouviez points out in this issue: 'The historiography has primarily focused on Maritz's work with the casting process and minimized his collaborations on technical matters with the Navy suppliers.'<sup>23</sup> The French state's tactic for implementing this technological change was to use the facilities and knowhow of two French supplier-cum-entrepreneurs, Bertin and Blanchard de Sainte-Catherine, who came up with technical solutions to the challenges encountered by navy and army officials. When they were finally rewarded with supply contracts, they helped to spread Maritz's technique among other ironworkers, thus bringing in this crucial technological change in French artillery production.<sup>24</sup> In Spain, a similar effort to overhaul the artillery production technology ended in diametrically opposed results, when the state ruled out *a priori* any collaboration with ironworking entrepreneurs and even went so far as to expropriate some existing private foundries. Implementation of technical innovations in the companies now run by the military culminated in a situation in which the state could no longer turn back to the former ironworking entrepreneurs. It therefore had to resort to mass purchases of cannons abroad, such as from the French entrepreneur Louis Blanchard or the English firm Carron.<sup>25</sup> In understanding the impact of military technology, the most important factor seems not to have been the technical advance itself, but the historical circumstances of its implementation. This again calls for further research into the relations between state and entrepreneurs.

We do not only need such a broader historical understanding for dealing with the more sophisticated and complex military supplies, such as ships of the line and artillery. The same is true for simpler military supplies, such as hand arms. Technical innovations in hand arms, such as the introduction and development of the flintlock, rifled barrels, the design of halberds, paper cartridges, or the introduction of bayoneted rifles, have been assigned important effects on the development of military tactics. Innovations in this area have been linked to the standardisation of troops, training, and battle tactics, forcing the state to take full responsibility for increasing control over the output, quality and use of these new arms.<sup>26</sup> However, once again, increasing state control could go hand in hand with a substantial expansion of private industry. For example, small-scale Dutch artisan workshops decided to specialise in the production of matches, grenades, barrels, locks, rifle butts, brass rings, sword blades, or pike heads, with other workshops specialising in the assembly of the separate parts, thanks to the enormous standardised demand for specific weapons generated by subsequent wars and an increasing export market.<sup>27</sup> In another example, Birmingham producers successfully introduced steel into the parts and design.<sup>28</sup> The continual changes in the arms models demanded by the English state, and the growing scale of this demand, acted as a spur to these producers and enabled them to meet new demands and bring in technical changes.<sup>29</sup> As Chris Evans concludes, the production and technical challenges were satisfactorily met by a crafts-based business structure and scattered industry where 'the

output of the Birmingham gun trade issued from a complex production matrix that combined in-house workers with a dispersed body of artisans'. The key feature was that the producers and merchants achieved a stable working format: 'The muskets for which Birmingham became famous emerged from streams of materials and credit that surged and eddied through the courts and cellars of the town'.<sup>30</sup> The British state encountered no difficulties in enforcing technical changes on these suppliers, to the extent that it even came to impose the use of given raw materials: 'the Navy Board insisted on its contractors using high-grade Swedish iron, 'Orground'.<sup>31</sup> Likewise, the Dutch state standardised the technical features of weaponry, among others by deciding upon just one specific calibre for the muskets.<sup>32</sup> As a result, in many cases the production of hand arms remained in private hands throughout the eighteenth century.

One of the reasons why these producers were indeed able to take on the necessary technological innovations was that they also worked for a civilian market. As Robert Martello shows, the American entrepreneur and silversmith Paul Revere harnessed his civilian business by offering himself as a supplier to the recently set-up North American navy and experienced no difficulties in developing a copper-sheathing production model for the hulls of American war ships.<sup>33</sup> For Revere, the civilian side of his business enabled him to cope with the technological innovations required by the military side; this in turn allowed him to increase his output to take on new civilian orders. The interaction between civilian and military business tended to multiply the knock-on effect of the innovations in military technology.

### The fiscal-military state

The debate on war finance is a third field that has tended to occlude the role played by military entrepreneurs. The sharp increase in the cost of war during the Early Modern Age has been the cynosure of a legion of historians who dealt with the question how war ended up affecting economy and society. These historians have stressed above all how states rustled up the necessary taxation and other financial resources for meeting their soaring war needs. This again highlighted the importance of administrative changes that increased the central state's capacity for revenue management, as well as the importance of the development of public-debt markets, which also depended on the state's regulatory institutions and creditworthiness.<sup>34</sup> The concept of the 'fiscal military state' introduced by John Brewer underlined the state's crucial role, and many historians have used this idea to explain national differences in resource-raising capacity.<sup>35</sup>

Subsequent studies of taxation and public debt backtracked somewhat on the state's overriding role. It is now more widely recognised that central bureaucracies continued to rely on interest groups outside the state who intervened not only in revenue-raising procedures, but also in the creation and linking up of public-debt markets. Comparative studies of state formation have revealed the large differences in states' proficiency in raising all the resources they needed, fundamentally affecting these states' war-making capacities. The extending of relatively open public-debt markets, secured against future revenue or by strengthening the state's creditworthiness with private financial sureties and contributions, and the establishment of a strong network of reliable tax farmers, became important assets in the race for military dominance.<sup>36</sup> With the state's ostensibly 'last-ditch' recourse to the world of financiers, new military enterprises gained ample opportunities. Nevertheless, as



a result of the focus within this narrative on the increasing efficiency in resource gathering of the central state, the financiers and military contractors involved have largely remained in the shadows.

In their introduction to a recent collection of essays on military entrepreneurs, Jeff Fynn-Paul, Marjolein 't Hart and Griet Vermeesch made a distinction between three groups: the entrepreneurs who boosted the state's financial capacity; those who provided troops; and, finally, those who supplied arms, food, uniforms or other military provisions.<sup>37</sup> The categorisation delineates the different tasks for which the state relied on brokers, merchants and middlemen. However, it is also important not to over-emphasise the distinctions, since for many entrepreneurs, combining these different lines of business and connecting them to non-military activities seems to have been a key strategy for commercial success. Numerous financiers became military entrepreneurs almost by accident. Their main business remained the supply of public or private credit, rather than the management of production and distribution of military supplies. Military demand for finances might have yielded massive profits, yet was always risky too, since wars entailed urgent and unforeseeable claims and tended to eat up the lion's share of private credit, with no guarantee that the state would pay on time to enable these financiers to recoup their investments. Many big and small entrepreneurs therefore did not enter military financing wholesale. Instead, they regarded military business as one element in their investment portfolios, employing the same risk-spreading strategies as non-military entrepreneurs. In this way, thousands of businessmen became interested in production, distribution or financing arrangements to satisfy the state's military demand, frequently in a temporary way and at many levels at the same time. In this issue, Gordon Bannerman shows their enormous variation because of widespread sub-contracting.<sup>38</sup>

The reasons lying behind the entrepreneurs' interest in becoming contractors could be highly diverse, just as diverse as the options of participation. For example, Richard Buel explains in detail how the North American rebels acquired a sudden interest in becoming military contractors when the French army was shipped to the Americas to assist in the rebellion of the Thirteen Colonies. The possibility of obtaining bills of exchange used by the French army against funds back in Europe for several North-American merchants represented the chance of keeping up their activity in international trade, even to the point where 'individual farmers were willing to sell to contractors who had access to bills on Europe'.<sup>39</sup> In the same way the Havana business elite was interested in participating in the construction and supplying of the Havana dockyard, for the main reason that the state paid them with *plata fuerte* (strong currency) from Mexico. These businessmen spent low-quality currency on their payments accruing from supplies in Cuba and then held back the *plata fuerte* for their international trade deals, the prime object of their business.<sup>40</sup>

Studies based on the overarching idea of the fiscal-military state tend to view military entrepreneurs through the prism of the state's financial strains, overlooking the diversity of motivations that could lead businessmen to invest in warfare. For example, the Spanish financier and merchant Simón Aragorri was not primarily interested in victualling the Spanish army in the 1760s because of the potential profitability of the supply business. His eagerness to obtain the contract stemmed, rather, from the fact that the importation of grain for the army gave him the necessary cover for the legal and illegal exportation of Spanish silver. Participation in the military-supply business simply provided one way to validate the rest of his business activities, including profiting from Caribbean sugar plantations.<sup>41</sup> Likewise, the



Scottish merchant Richard Oswald managed to cope with the interruptions in his civilian trade during the Seven Years War by a substantial increase of his military supply business. His dense and powerful network of commission agents, subcontractors, credit and information, firmly established in Europe and the Atlantic before the war, was called into service for new military-supply contracts. As David Hancock argues, Oswald and his associates saw in this war a chance to convince the state of their prowess in coordinating, distributing and producing services and goods.<sup>42</sup> Participation in war contracts was also a good way of developing business for the young Prussians David Splitberger and Gottfried Adolf Daum. In 1712, they decided to embark on a cannonball supply contract for the Dresden dockyard, despite their limited experience in this field. Hitherto, they had worked primarily as accountants and commission agents for other merchants. The ulterior motive of these merchants was not so much a special interest in the military supply business, but to gain a foothold in the thriving import trade of colonial goods in Germany, Poland and Russia. The military contract was a way of setting up their own network of commission agents to strengthen their business strategy. The strategy worked well, and the company Splitgerber and Daum continued integrating commercial, financial and military-supply businesses, managing to stave off bankruptcy repeatedly. Along the way they became Prussia's biggest arms producers, running factories in Spandau and Postdam, and also the biggest exporters of woollen fabrics to Russia. Their business solidity drove them towards increasing financial specialisation and finally to set themselves up as a powerful private bank in 1792, under the name of the Schickler Brothers.<sup>43</sup>

This brings us to a crucial point: what finally characterised the eighteenth-century businessperson was not specialisation in one type of activity, but rather the interrelation of several branches. As Nuala Zahedieh has shown, in a world riddled by uncertainty the interrelation of different business lines was the best way of hedging these risks.<sup>44</sup> Contrary to the persistent image of the military-entrepreneur as a 'special category' of businessperson, motivated by a rent-seeking attitude and extraordinary opportunities to profit from corruption, in the application of diversification strategies integrating production, trade and finance, military entrepreneurs acted as the quintessential eighteenth-century capitalists. The building of powerful fiscal-military states often depended on the entrepreneurs' ability to offset losses in one area of their business with profits in other areas.

### **Beyond Redlich's 'enterpriser-colonels'**

A final line of historical research that has skewed our understanding of the eighteenth-century military entrepreneur, paradoxically, has been the classical study of military entrepreneurs itself. Ironically, the very quality of Fritz Redlich's seminal work on the Thirty Years War has led to the generalisation of a model of the military entrepreneur that in fact was representative for a very specific context. Redlich analysed a group of semi-private military commanders whose heyday was the first half of the seventeenth century. These mercenaries, like Wallenstein, Mansfeld, Saxe-Weimar, Pappeheim, Hatzfeld and Torstennoson, dealt with the warring states' recruitment, supply and financing problems. As tenured colonels of military units, they demonstrated extraordinary prowess in obtaining credit and coordinating the procurement and distribution of all resources that had to be mobilised, acting in effect as businessmen. Their reliance on such 'enterpriser-colonels' allowed the warring states to boost their creditworthiness and keep bigger armed forces in the field for a longer time.

Redlich's work has served as the benchmark in state-construction debates. It has been interpreted as marking the final point of a war-privatisation stage, which would then give way in the late seventeenth century to a greater presence of the state in the management of military resources and the creation of standing armies: 'The military enterpriser system ... [was] actually an early step on the way to total state control over the trade in mercenaries'.<sup>45</sup>

David Parrott recently reconsidered the triumph of these 'enterpriser-colonels' during the Thirty Years War, arguing that the crucial factor during that war was access to increasingly extensive and international financing and military-supply networks. The military entrepreneurs of the Thirty Years War triumphed because they could tap into much bigger credit and production markets but they themselves did not get directly involved in the generation of these resources.<sup>46</sup> Their priority, in other words, was not the creation of the resources they needed, but rather the procurement and then, as military commanders, the employment thereof. Lengthening the highly destructive field campaigns during that war therefore in part functioned as a means to ensure recouping initial investments. These entrepreneurs demanded military resources from other businessmen, just as the state itself did. The designation of Redlich's enterpriser-colonel as the defining form of the early-modern business of war has drawn attention away from the large world of 'ordinary' military contractors on which the fortunes of Wallenstein and other such mercenary commanders relied. It has also strengthened the idea that the gradual decline of this particular form of business equalled a triumph of direct state-control over military entrepreneurship *per se*.

Sufficient evidence exists to suggest that the supposed swansong of Redlich's enterpriser-colonel in the Thirty Years War was in fact the climax of the presence of soldiers in the war business. Long after 1648, the venality of military posts and ownership of military commands guaranteed some continuity in the economic involvement of officers in their own military units.<sup>47</sup> However, the development of eighteenth-century public finances clearly shows that soldiers' capacity of managing the money circulating around military activity declined.<sup>48</sup> Administrative control of state expenditure turned out to be incompatible with these military officials' ample spending leeway. Negotiation and procurement of nearly all supplies needed by regiments came to be a matter solved by the state with separate military entrepreneurs rather than commanding officers. Even in Great Britain, which was relatively slow in ousting soldiers from the control of public money and business affairs, the change is evident. As Alan Guy showed, the English authorities chipped away at the colonels' traditional autonomy in providing themselves with most of the supplies they needed.<sup>49</sup> However, rather than shifting control completely to the central state, this created a new layer of entrepreneurs. As Guy pointed out in the case of the English regiments, the economic functions previously controlled by the colonels were taken over by 'regimental agents', each one working with several colonels. Together they constituted an 'agency empire'. To give just one example, the agent John Calcraft had 52 regiments in his portfolio by 1761.<sup>50</sup> The English colonels could henceforth profit only from embezzlement of soldiers' salaries plus some lower-value, locally produced supplies like uniforms, while the main profits of military entrepreneurship went elsewhere. In the Dutch Republic, 'military solicitors' performed similar functions as the British regimental agents, above all procuring the necessary funds from the paymasters' offices and advancing them recurrently on their own account, against a certain profit.<sup>51</sup> Elsewhere in Europe, army officials even lost control over the management of everyday supplies such as soldiers' clothing, as shown in the contribution of Sergio Solbes on the Spanish regiments.

Here, the main beneficiaries were large contractors, or *asentistas*, who acquired monopoly positions in supply from the state. Apart from the symbolic case of the *Casa Real* (household guard), all uniform matters were increasingly dealt with by the state through other types of entrepreneurs.<sup>52</sup> By the end of the eighteenth century, the military-supply business in Europe had definitively been wrested from the hands of soldiers, apart from some isolated examples. Colonels now had to make do with the crumbs of that business, and 'enterpriser-colonels' dropped out of the picture. This was not because the hour of the entrepreneurs had struck, as historians have hitherto claimed, but because it was now the hour of the state and the non-soldier entrepreneurs.

### The endurance of the 'contractor state'

As long as the framework of analysis is confined to the antagonism between states and entrepreneurs, it will be difficult to shrug off the yoke of the previous historiographic debates. A switch of attention to the relations between them, without presupposing an inbuilt confrontation, will substantially improve our grasp of the activities of these military entrepreneurs, as well as their contribution to the eighteenth-century 'contractor state'.

All eighteenth-century armies and navies procured their supplies mainly with the help of military entrepreneurs. Neither state production nor international markets could guarantee a sufficient supply to meet these states' military demands. Neither could they keep up with the demand peaks at times of war, or do so with the speed required by the exigencies of warfare. For example, English ship-building in royal dockyards under state control might function well in times of peace, as in the decades following the War of the Spanish Succession, but as soon as war broke out merchant yards had to be called on as these royal dockyards fell further and further behind the required pace.<sup>53</sup> Likewise, Prussian royal factories produced sufficient numbers of cannons until war came, whereupon other national producers had to be contracted or cannons had to be acquired abroad, from the Dutch and Swedish markets in particular.<sup>54</sup> In 1781, Lord Sandwich opposed private shipbuilding and was a staunch advocate of direct administration by the government, just as his distant predecessor John Hollond had done over a century earlier. Like most European politicians of the time, Lord Sandwich argued that the state was superior in wielding technical and economic control, necessary to fight embezzlement and corruption.<sup>55</sup> When war came, however, even Sandwich had to bow to the evident need for urgent rearmament and admitted that the 'new ships had to come from private contractors'.<sup>56</sup> Across Europe and throughout the eighteenth century, similar debates and situations cropped up repeatedly, with the opponents of private business changing their tune every time war demands soared. As Thomas Goossens has quite rightly pointed out for the Austrian Netherlands for the mid-eighteenth century: 'The overlapping of private and public interests does not seem to have caused any upheaval in Brussels at this point. A sense of realism, that the state on its own would not be able to fulfil this task, probably lay at the basis of this attitude.'<sup>57</sup> Much as the military men and politicians might inveigh against the military entrepreneurs; much as they might launch initiatives of all types, including across-the-board production under state-command, they were never able to rise to the stiff challenge of giving a stable response to soaring war demands.

In bringing these swingeing military-demand changes into the very centre of the debate we might better understand the main reason behind the endurance of the 'contractor state'. The state's military demand was by nature fickle and unpredictable. The problem of the

fluctuations in military demand affected all types of eighteenth-century companies and entrepreneurs. Take the example of the Spanish military entrepreneur Francisco Mendinueta; he proved incapable of keeping up with the state's munitions requirements, not due to any lack of production and growth capacity but rather to his inability to cope with the wild demand swings. The rollercoaster ride of demand peaks and troughs led him to lay off workers and cancel investments, with devastating effects for his firm.<sup>58</sup> These same effects prompted Frederick of Prussia to cancel the contracts for muskets at the end of the Silesian War: 'In 1747 Splitgerber and Daun were obliged to dismiss over a third of their 200 skilled craftsmen – who were not easy to replace, when in 1753 Frederick suddenly decided to place new orders for infantry muskets.'<sup>59</sup> Pierrick Pourchasse explains how the main concern of the French military entrepreneur Pierre Babaud de la Chaussade was to ensure a smooth and continuous state demand when he broke into the anchor production business in the 1730s, while he accepted all the state's anchor quality specifications without question.<sup>60</sup>

The main problem for Babaud, as for the other military entrepreneurs, was that with such a fickle demand a military supply business depending on a single client could never be viable. However, counterbalancing the problems created by the downward swings of supply were the many advantages accruing to military entrepreneurs by the upswings created by frequent wars. Any qualms held by English politicians and military men about private production shrivelled and faded away as soon as this became the only way to meet a sudden need for military supplies. At the outbreak of the Seven Years War, the English state required an extraordinarily high number of muskets, with notable technical changes and designs and within a tight deadline of a few months, whereupon 'the Board of Ordnance issued warrants for 25,000 new muskets in 1756, all of which were awarded to Birmingham contractors ... These were sizeable contracts, but they could be fulfilled with surprising speed.'<sup>61</sup> The success of these military entrepreneurs, and of this state, was not based on any special confidence of the English government in private production, but rather on the simple fact that the productive activity of these entrepreneurs relied on a more varied range of complementary demand beside the state's. As Chris Evans concludes, 'Indeed, non-military customers were crucial, despite the strong pulse of additional demand that accompanied the outbreak of every one of the eighteenth century's many wars. It was the non-state market that absorbed tens of thousands of firearms every year.'<sup>62</sup>

While counterbalancing state demand and private demand was a viable strategy in countries with strongly developed markets, such as England and the Dutch Republic, for much of Europe the options were more restricted.<sup>63</sup> The problems for the state and the entrepreneurs tended to escalate when no possibility of shifting between complementary demand structures existed. One solution was to reserve the greatest possible amount of army and navy supplies for military purposes. States and entrepreneurs did apply scarcity management models to a certain extent, stymying competition from other markets and setting products of strategic value aside for military supplies. Well-known is the example of woodland reserved for the use of mainland navies, but the list of reserved products was a growing one, in line with the increase in military demand.<sup>64</sup> Reserved resources included personnel, as occurred with the fishermen's register in coastal areas, which had to bring forward sailors for the war navy despite unending complaints from the fishing sector. This resource-reserving policy worsened the problem and set up a vicious circle, stunting the development of competing markets and ultimately preventing them from providing alternative solutions with soaring military demands.

A combination of resource reservation and market weakness tended to favour a monopoly trend that both the central state and entrepreneurs were keen to see continue. More often than not, this was not a simple matter of rent seekers exploiting state needs, but rather the only available way of dealing with a soaring and yet capricious demand. State authorities, on the other hand, tended to deal more and more with single interlocutors in order to increase the chances of successful contract performance. The justification given for a single and general victualling contract for the Austrian Netherlands army in 1726 was 'because one general contract is less inconvenient and subject to less difficulties than four separate contracts'.<sup>65</sup> It allowed the state to seek control of the supply side, imposing prices and, if need be, delay payments. At the same time, the state boosted its creditworthiness with a credit pyramid taking in a whole range of smaller entrepreneurs negotiating with the main contractors. In cases when this mutual dependence became too rigid and state finances faltered, the monopolist entrepreneur faced bankruptcy. Frequently, bankruptcies could only be staved off by granting other monopolies or trading privileges, resulting in a dangerous spiral of mutual dependence that might drive both the state and its privileged entrepreneurs to the wall.<sup>66</sup> However, even in the most extreme cases of full state bankruptcy and temporary collapse of the war-related markets, the most likely outcome of the crisis remained the introduction of new arrangements for the cooperation between war-merchants and the state.

### In this issue

Challenging the state-centred historiography on the impact of war in the early-modern period forces us to rethink the role of the military entrepreneur, especially in the eighteenth century when military spending peaked. Presenting examples from Britain, France, Spain and the Spanish Americas, all the contributions in this special issue in their own way revise the standard narrative of the 'decline of the military entrepreneur'. Instead, they show the continuing interdependence of the eighteenth-century state and its contractors. This is not to suggest that the relationship was always harmonious. As each of the contributions shows, the pact between the state and its entrepreneurs was fragile, often conflict-ridden, and frequently the stage for both favouritism and spectacular falls from favour. Nevertheless, through the cooperation with the state, warfare also created one of the thriving areas of investment for emerging capitalist elites. Whether this led to a strengthening of both the state and private businesses, an unequal dependence benefiting only one of the two parties or a vicious cycle damaging both, depended upon particular circumstances that fluctuated along with war opportunities, general market development and state formation. Yet, whatever the circumstances, the military entrepreneur remained a key actor throughout the eighteenth century.

The contributors to this issue break new ground for understanding the overall nature of the eighteenth-century business of war and its relation to state-formation. Gordon Bannerman shows how British war demand stimulated extensive subcontracting involving numerous partnerships on the local level. The width of subcontracting networks reduced the level of risk of war entrepreneurship, resulting at the same time in stimuli for the war economy. Contrary to the perceived image of military entrepreneurs as of necessity operating on a large scale, he shows the great diversity of the types of businesses dealing in military supplies, including large contractors such as bread supplier John Willan, as well as many

smaller-scale subcontractors. The two complementary studies into French naval supply by David Plouviez and Pierrick Pourchasse further strengthen this image of diversity, bringing new nuance to the way we perceive the connections between military finance and military supply. They also show the extent to which even large-scale eighteenth-century military entrepreneurs such as Pierre Babaud de la Chaussade relied on diversification strategies similar to those pursued by civilian businesses of this period, rather than a stereotyped rent-seeking through royal favouritism alone.

Bannerman's study shows us an example where the strengthening of the British state and the existence of developed market structures clearly enhanced the possibilities for military investors, while Plouviez and Pourchasse describe a situation where individual businesses thrived, although the overall options for relying on private capital were more limited than across the Channel. In contrast to both, Sergio Solbes Ferri and Agustín González Enciso present us with cases in which the weakness of the Spanish state and the low level of market development on the ground led to a much more conflictual situation. González Enciso shows how the erratic policies of subsequent war ministers towards the state's cannon suppliers hindered technological development and made the sector as a whole economically unsustainable in the long run. Solbes Ferri shows a similar volatility in the way the Spanish state organised the supply of its soldiers' uniforms, contrasting it to 'the stability offered by the British system' which made possible the 'transformation of the industrial structures of the country'. Iván Valdez-Bubnov adds to this the important story of capital intensive and highly politicised naval production, the evolution of which he tracks from the second half of the seventeenth century to the end of the eighteenth, both on the Spanish mainland and in the Spanish Americas. Perhaps ironically, this comparison shows greater room for manoeuvre for the economic elites at the periphery of the Empire than in its core, suggesting that while in the British case capital accumulation was enhanced by being close to the state, in the case of the Spanish Empire it benefited from being at a great distance.

Apart from illuminating such wider patterns, the contributions also provide a great wealth of information on the daily minutiae of the interactions between states and military suppliers. One issue that all of the contributions touch on in one way or another is the importance of the military contract itself for understanding the relationship between the state and military markets. The state's quality-control arrangements in military supplies greatly helped to boost private business's technical capacity in the eighteenth century, by means of the contracts signed with suppliers beforehand and also at the moment of delivery. Whether it was in the supply of large quantities of relatively cheap products such as uniforms (Sergio Solbes Ferri), in technologically difficult areas such as cannon production (Agustín González Enciso), or in the provision of the most complex and expensive war-related product of all, the complete ship of the line (Iván Valdez-Bubnov), the state somehow had to invent a seemingly objective measure to check whether the contractor's obligations had been met. One way was to require the contractors to forward test pieces before production began, in order to confirm that they would meet agreed specifications. When forwarding test pieces would be impractical, such as with ships or cannons, the state submitted the actual product to tests before acceptance. By introducing particular forms of quality control, the military-supply contract was the main vector of technological change in military supplies. We therefore need to rethink the traditional interpretation whereby contracts are seen as the reflection of a continual tussle between state and suppliers, as well as evidence of constant corruption.<sup>67</sup>



The contract played a key role in spreading technology and quality throughout the system. Of the two intervening parties, the state and entrepreneurs, the entrepreneurs frequently were the ones who were the most interested in the terms and conditions being clear from the start. First and foremost, this served as a safeguard against any arbitrary changes in the specifications required by the receiving military personnel and functionaries. Entrepreneurs were hence keen to establish all the specifications of the supply. French contractors offered the government technical reports and specifications on military supplies, which were then taken up by state officials to lay down the general terms and conditions, as explained by David Plouviez in this issue. Iván Valdez-Bubnov showed in a similar vein how Spanish private contractors and *asentistas* collaborated closely with the government in the technical standardisation of naval supplies and in creating what he shrewdly dubbed ‘technological legislation’.<sup>68</sup> The two-way flow of technical information was thus of interest to both parties, state and entrepreneur. The contract reflected their collective effort to create a sort of ‘institutional memory’, while also endowing them with an efficient mechanism for spreading technological innovation further afield.

As these contributions show, rediscovering the centrality of the business of war in the functioning of the eighteenth-century state does not only enhance our understanding of the forces that shaped this century in which military violence reached new peaks, but also fundamentally changes our understanding of the process of state formation. The centralisation processes entailed in building the fiscal-military state did not lead to the secular decline of military entrepreneurship, but greatly enlarged its field of action. And rather than providing profitable venues only for a special branch of investors bent on rent-seeking and corruption, the extension of the business of war was well-integrated with civilian trade, industry and finance. With diverse outcomes depending on the specific regional and national context, military entrepreneurs remained key players in state formation and market development alike.

## Notes

1. Some of the most prominent recent exceptions include Fynn-Paul, *War, Entrepreneurs*; Parrott, *Business of War*; Bannerman, *Merchants and the Military*; Knight and Willcox, *Sustaining the Fleet*; Torres-Sánchez, *Military Entrepreneurs*.
2. Harrison, ‘Capitalism at War’.
3. Melman, ‘Economic Consequences’.
4. Scranton and Fridenson, *Reimagining Business History*, 5–6.
5. Harrison, ‘Preface’, xviii.
6. Scranton and Fridenson, *Reimagining Business History*, 84–85.
7. E.g. Wilson, *Business of Civil War*; Scherner, Streb and Tilly, ‘Supplier networks’, and Horrocks, ‘British Industrial R&D’.
8. Namier, ‘Anthony Bacon’.
9. Redlich, *German Military Enterpriser*; Parrott, *Business of War*.
10. Bonney, *Rise of Fiscal State*; Gun, Grummit, and Cools, ‘War and the State’.
11. Fynn-Paul, ‘t Hart and Vermeesch’, ‘Introduction’.
12. E.g. Bannerman, *Merchants and the Military*; Brandon, *War, Capital*; Morriss, *Foundations*.
13. Knight and Wilcox, *Sustaining the Fleet*; Conway and Torres-Sánchez, *Spending of States*; Harding and Solbes Ferri, *Contractor State*. An international research group devoted to studying the Contractor State has been operative over the last decade or so, <https://www.unav.edu/web/facultad-de-ciencias-economicas-y-empresariales/contractor-state>.
14. Goossens, ‘The Grip of the State?’, 202.

15. McGilvary, *East India Patronage*.
16. 'Loyalty to the Hanoverian dynasty was fundamental, and it was demonstrably loyal Scots who supplied the army after 1746'; Bannerman, *Merchants and the Military*, 104.
17. Of course the involvement of local elites did not always have this effect. Indeed, the possibility of inadvertently enhancing an elite's degree of authority could be grounds for the government to reject similar forms of cooperation. When the Irish aristocracy offered to create new regiments for the British Crown, this offer was turned down precisely to block this landowning elite's expansion of power. Conway, 'Entrepreneurs', 115.
18. Lachmann, *Capitalists*, 94.
19. Torres-Sánchez, *Military Entrepreneurs*, 58–60.
20. Rogers, *Military Revolution*; Black, *Rethinking Military History*; Black, 'Military Revolution?'
21. Cf. Rodger, 'From the "Military Revolution"', 120.
22. Knight and Wilcox, *Sustaining the Fleet*; Morriss, *Foundations*, 132.
23. Plouviez, 'The French Navy', in this issue.
24. Plouviez, *La Marine Française*, 350.
25. González Enciso, 'War Contracting', in this issue.
26. Alder, *Engineering the Revolution*; Blackmore, *British military firearms*.
27. 't Hart, *Dutch Wars of Independence*, 283–284.
28. Behagg, 'Mass production'.
29. Smith, 'Galtons of Birmingham'.
30. Evans and Rydén, *Baltic Iron*, 154.
31. Evans and Rydén, *Baltic Iron*, 270.
32. 't Hart, *Dutch Wars of Independence*, 61 and 184–185.
33. Martello, *Midnight Ride*.
34. Dickson, *Financial Revolution*; Bonney, *Economies and State Finance*; Yun-Casalilla, O'Brien and Comín, *Rise of Fiscal States*.
35. Brewer, *Sinews of Power*; Glete, *War and the State*; Storrs, *Fiscal-Military State*.
36. Torres-Sánchez, *War, State and Development*; Graham and Walsh, *British Fiscal-Military States*; González Enciso, *War, Power and Economy*.
37. Fynn-Paul, 't Hart and Vermeesch, 'Introduction', 8.
38. Bannerman, 'The impact of war', in this issue.
39. Buel, *In Irons*, 159.
40. Valdez-Bubnov, 'Involving the Elites', in this issue.
41. Torres-Sánchez, *Military Entrepreneurs*, 84.
42. Hancock, *Citizens of the World*, 239.
43. Henderson, *Studies in Economic Policy*, 16. On this company see also Showalter, *Wars of Frederick*, 99–101.
44. Zahedieh, *Capital and Colonies*.
45. Percy, *Mercenaries*, 88; cf. Charles Tilly's categorisation of the 'Age of Brokerage' (1400–1700), *Coercion, Capital*, 29.
46. Parrott, *Business of War*.
47. Dré villon, *L'Impôt du Sang*.
48. Torres-Sánchez, *Constructing Fiscal-Military State*.
49. Guy, *Oeconomy and discipline*, 127.
50. Guy, 'Regimental Agency'.
51. Brandon, *War, Capital*, Chapter 4.
52. Solbes Ferri, 'Spanish Contractor State', in this issue.
53. Knight and Beckett, 'Building and Maintenance'.
54. Showalter, *Wars of Frederick*, 100.
55. Baugh, *British Naval Administration*, 447.
56. Knight and Beckett, 'Building and Maintenance', 43.
57. Goossens, 'Grip of the State?', 198.
58. González Enciso, 'War Contracting', in this issue.
59. Showalter, *Wars of Frederick*, 99.

60. Pourchasse, 'Military Entrepreneurs', in this issue.
61. Evans, *Baltic Iron*, 154–155.
62. Evans, *Baltic Iron*, 155.
63. Bowen, 'Contractor State'.
64. Wing, *Roots of Empire*.
65. Goossens, 'Grip of the State', 202.
66. Torres-Sánchez, *Military Entrepreneurs*.
67. Baker, *Government and Contractors*, 4.
68. Valdez-Bubnov, *Poder Naval*, 179, as well as his contribution to this issue.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Funding

Several of the papers collected in this Special Issue were first presented at the international workshop 'The Economic Impact of War 1648-1815', which took place at the Netherlands Institute for Advanced Study on 4-5 December 2014, and was co-funded by NIAS and Huygens-ING. Further discussion took place at a session with the same title at the XVIIth World Economic History Congress in Kyoto, 3-7 August 2015. Editorial work on the special issue and the work on the introduction were executed with the help of a grant from the Spanish government, ref. HAR 2015-64165-C2-1-P, and an NWO Veni grant, no. 275-53-015.

## Notes on contributors

**Rafael Torres-Sánchez** is Professor of History at the Universidad de Navarra, Spain. His main area of is eighteenth-century Spanish warfare and its interconnection with the development of the state and economy. He is the author and editor of many books, including *Military Entrepreneurs and the Spanish Contractor State in the Eighteenth Century* (Oxford: Oxford University Press, 2016) and *Constructing a Fiscal-Military State in Eighteenth-Century Spain* (Hampshire: Palgrave-Macmillan, 2015) and *El precio de la guerra: El estado fiscal-militar de Carlos III, 1779-1783* (Madrid: Marcial Pons, 2013). His website can be found at <http://www.unav.edu/centro/contractorstate/>

**Prof. Dr. Marjolein 't Hart** is Head of the Department of History at Huygens Institute for the History of the Netherlands (Amsterdam) and Professor of the History of State Formation in Global Perspective at Vrije Universiteit Amsterdam. Her current research interests focus on the interrelation between warfare and society in the early modern Netherlands and Europe. She is the author of, among others, *The Dutch Wars of Independence. War and commerce in the Netherlands 1570-1680* (London: Routledge 2014).

**Dr. Pepijn Brandon** is Assistant Professor at the Vrije Universiteit in Amsterdam and Senior Researcher at the International Institute of Social History. He is involved in several research projects focused on war, slavery and capitalist development in the early-modern Dutch world. He is the author of *War, Capital, and the Dutch State (1588-1795)* (Leiden: Brill, 2015).

## References

- Alder, Ken. *Engineering the Revolution: Arms and Enlightenment in France, 1763–1815*. Princeton NJ: Princeton University Press, 1997.
- Baker, Norman. *Government and Contractors: The British Treasury and War Supplies 1775–1783*. London: Athlone Press, 1971.

- Bannerman, Gordon E. *Merchants and the Military in Eighteenth-Century: British Army Contracts and Domestic Supply, 1739–1763*. London: Pickering & Chatto, 2008.
- Bannerman, Gordon. "The Impact of War: New Business Networks and Small-Scale Contractors in Britain, 1739-1770." *In this issue*.
- Baugh, Daniel A. *British Naval Administration in the Age of Walpole*. Princeton NJ: Princeton University Press, 1965.
- Behagg, Clive. "Mass Production without the Factory: Craft Producers, Guns and Small Firm Innovation, 1790-1815." *Business History XL*, 3 (1998): 1–15.
- Black, Jeremy. *Rethinking Military History*. London and New York: Routledge, 2004.
- Black, Jeremy. "Was There a Military Revolution in Early Modern Europe?" *History Today* 58, no. 7 (2008): 34–41.
- Blackmore, Howard L. *British Military Firearms 1650–1850*. Huntingdon: Ken Trotman Publishing, 1994.
- Bonney, Richard, ed. *Economic Systems and State Finance: The Origins of the Modern State in Europe 13th to 18th Centuries*. Oxford: Clarendon Press, 1995.
- Bonney, Richard, ed. *The Rise of the Fiscal State in Europe C. 1200-1815*. Oxford: Clarendon Press, 1999.
- Bowen, H. V. "Round Table: The Contractor State, C. 1650-1815." *International Journal of Maritime History* 25 (2013): 239–274.
- Brandon, Pepijn. *War, Capital, and the Dutch State (1588–1795)*. Leiden: Brill, 2015.
- Brewer, John. *The Sinews of Power*. Cambridge, Mass.: Harvard University Press, 1989.
- Buel, Richard. *In Irons: Britain's Naval Supremacy and the American Revolutionary Economy*. New Haven, CT: Yale University Press, 1998.
- Conway, Stephen. "Entrepreneurs and the Recruitment of the British Army in the War of American Independence, 1775-1783." In *War, Entrepreneurs, and the State in Europe and the Mediterranean*, edited by Jeff Fynn-Paul, 111–130. Leiden: Brill, 2014.
- Conway, Stephen, and Rafael Torres-Sánchez, eds. *The Spending of States: Military Expenditure during the Long Eighteenth Century. Patterns, Organization and Consequences, 1650-1815*. Saarbrücken: VDM Verlag, 2011.
- Dickson, P. G. M. *The Financial Revolution in England: A Study in the Development of Public Credit, 1688–1756*. London: MacMillan, 1967.
- Drévilion, Hervé. *L'Impôt du Sang : Le Métier des Armes sous Louis XIV* [Blood Tax: The Pursuit of Arms under Louis XIV]. Paris: Librairie Jules Tallandier, 2005.
- Fynn-Paul, Jeff, Marjolein 't Hart, and Griet Vermeesch. "Introduction: Entrepreneurs, Military Supply, and State Formation in the Late Medieval and Early Modern Period: New Directions." In *War, Entrepreneurs, and the State in Europe and the Mediterranean*, edited by Jeff Fynn-Paul, 1–13. Leiden: Brill, 2014.
- Glete, Jan. *War and the State in Early Modern Europe*. London and New York: Routledge, 2002.
- González Enciso, Agustín. *War, Power and the Economy: Mercantilism and State Formation in 18th Century Europe*. London and New York: Routledge, 2017.
- González Enciso, Agustín. "War Contracting and Artillery Production in Spain." *In this issue*.
- Goossens, Thomas. "The Grip of the State? Government Control over Provision of the Army in the Austrian Netherlands, 1725-1744." In *War, Entrepreneurs, and the State in Europe and the Mediterranean*, edited by Jeff Fynn-Paul, 193–211. Leiden: Brill, 2014.
- Graham, Aaron, and Patrick Walsh, eds. *The British Fiscal-Military States, 1660-C. 1783*. London and New York: Routledge, 2016.
- Gunn, S., D. Grummitt, and H. Cools. "War and the State in Early Modern Europe: Widening the Debate." *War in History* 15, no. 4 (2008): 371–388.
- Guy, A.J. "Regimental Agency in the British Standing Army, 1714-1763." *Bulletin of John Rylands University Library of Manchester*, LXII (1980): 324–453 and LXIII (1980): 31–57.
- Guy, A. J. *Oeconomy and Discipline: Officership and Administration in the British Army, 1714–1763*. Manchester, NH: Manchester University Press, 1985.
- Hancock, David. *Citizens of the World: London Merchants and the Integration of the British Atlantic Community, 1735–1785*. Cambridge: Cambridge University Press, 1995.
- Harding, Richard and Sergio Solbes Ferri, eds. *The Contractor State and Its Implications (1659-1815)*. Las Palmas de Gran Canaria: Universidad de Las Palmas de Gran Canaria, 2012.

- Harrison, Mark. "Preface." In *The Economics of World War II*, edited by Mark Harrison, xvii–xx. Cambridge: Cambridge University Press, 1998.
- Harrison, Mark. "Capitalism at War." In *The Cambridge History of Capitalism*. vol. II, edited by Larry Neal and Jeffrey G Williamson, 348–383. Cambridge: Cambridge University Press, 2014.
- Hart, Marjolein 't. *The Dutch Wars of Independence: War and Commerce in the Dutch Republic 1570–1680*. London: Routledge, 2014.
- Henderson, W. O. *Studies in the Economic Policy of Frederick the Great*. London and New York: Routledge, 1963.
- Horrocks, Sally M. "Enthusiasm Constrained? British Industrial R&D and the Transition from War to Peace, 1942–51." *Business History* 41, no. 3 (1999): 42–63.
- Knight, Roger, and Martin Wilcox. *Sustaining the Fleet, 1793–1815: War, the British Navy and the Contractor State*. Woodbridge: Boydell Press, 2010.
- Knight, Roger, and John Beckett. "The Building and Maintenance of the British Fleet during the Anglo-French Wars, 1688–1815." In *Les Marines de Guerre Europeennes, XVII–XVIII Siecles* [The European Navies in the 17th–18th Century], edited by M. Acerra, J. Merino, and J. Meyer, 35–50. Paris: Presse de l'Université de Paris-Sorbonne, 1985.
- Lachmann, Richard. *Capitalists in Spite of Themselves: Elite Conflict and Economic Transitions in Early Modern Europe*. Oxford etc.: Oxford University Press, 2000.
- Martello, Robert. *Midnight Ride, Industrial Dawn: Paul Revere and the Growth of American Enterprise*. Baltimore, MD: Johns Hopkins University Press, 2010.
- McGilvary, George K. *East India Patronage and the British State: The Scottish Elite and Politics in the Eighteenth Century*. London: I.B. Tauris, 2008.
- Melman, Seymour. "Economic Consequences of the Arms Race: The Second-Rate Economy." *The American Economic Review* 78, no. 2 (1988): 55–59.
- Morriss, Roger. *The Foundations of British Maritime Ascendancy: Resources, Logistics and the State, 1755–1815*. Cambridge: Cambridge University Press, 2011.
- Namier, Lewis B. "Anthony Bacon, M.P.: an Eighteenth-Century Merchant." *Journal of Economic and Business History* 2 (1929): 20–70.
- Parrott, David. *The Business of War*. Cambridge: Cambridge University Press, 2012.
- Percy, Sarah. *Mercenaries*. Oxford: Oxford University Press, 2007.
- Plouviez, David. *La Marine Française et ses Réseaux Économiques au XVIIIe Siècle* [The French Navy and its Economic Resources in the Eighteenth Century]. Paris: Rivages des Xantons, 2014.
- Plouviez, David. "The French Navy and War Entrepreneurs: Identity, Business Relations, Conflicts, and Cooperation in the Eighteenth Century." [In this issue](#).
- Pourchasse, Pierrick. "Military Entrepreneurs and the Development of the French Economy in The 18th Century." [In this issue](#).
- Redlich, Fritz. *The German Military Enterpriser and His Workforce: A Study in European Economic and Social History*. 2 vols. Wiesbaden: Franz Steiner Verlag GmbH., 1964–1965.
- Rodger, N. A. M. "From the 'Military Revolution' to the 'Fiscal-Naval State'." *Journal for Maritime Research* 13, no. 2 (2011): 119–128.
- Rogers, Clifford, ed. *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe*. Boulder: Westview Press, 1995.
- Rydén, G., and C. Evans. *Baltic Iron in the Atlantic World in the Eighteenth Century*. Leiden: Brill, 2007.
- Schnerer, Jonas, Jochen Streb, and Stephanie Tilly. "Supplier Networks in the German Aircraft Industry during World War II and Their Long-Term Effects on West Germany's Automobile Industry during the 'Wirtschaftswunder'." *Business History* 56, no. 6 (2014): 996–1020.
- Scranton, Philip, and Patrick Fridenson. *Reimagining Business History*. Baltimore, MD: The Johns Hopkins University Press, 2013.
- Showalter, Dennis E. *The Wars of Frederick the Great*. London: Longman, 1996.
- Smith, D. M. D. "The Galtons of Birmingham: Quaker Gun-Merchants and Bankers, 1702–1831." *Business History* (1967): 132–150.
- Solbes Ferri, Sergio. "The Spanish Contractor State in the Eighteenth Century: Interaction of Political Power with the Market." [In this issue](#).

- Storrs, Christopher, ed. *The Fiscal-Military State in Eighteenth-Century Europe: Essays in Honour of P.G.M. Dickson*. Aldershot: Ashgate, 2009.
- Tilly, Charles. *Coercion, Capital, and European States, AD 990–1990*. Cambridge, MA: Blackwell, 1990.
- Torres-Sánchez, Rafael, ed. *War, State and Development: Fiscal-Military States in the Eighteenth Century*. Pamplona: Eunsá, 2007.
- Torres-Sánchez, Rafael. *Constructing a Fiscal-Military State in Eighteenth-Century Spain*. Hampshire: Palgrave Macmillan, 2015.
- Torres-Sánchez, Rafael. *Military Entrepreneurs and the Spanish Contractor State in the Eighteenth Century*. Oxford: Oxford University Press, 2016.
- Valdez-Bubnov, Iván. *Poder Naval y Modernización del Estado: Política de Construcción Naval Española (Siglos XVI-XVIII)* [Naval Power and State Modernization: The Politics of Spanish Naval Construction (XVI-XVIII century)]. México: Unam, 2011.
- Valdez-Bubnov, Iván. "Involving the Elites: Credit and Public Donations for Naval Shipbuilding under the Spanish Habsburg and Bourbon Regimes." [In this issue](#).
- Wilson, Mark R. *The Business of Civil War: Military Mobilization and the State, 1861–1865*. Baltimore, MD: The Johns Hopkins University Press, 2006.
- Wing, John T., *Roots of Empire: Forests and State Power in Early Modern Spain, C. 1500–1750*, Leiden: Brill, 2015.
- Yun-Casalilla, Bartolomé, Patrick K. O'Brien, and Francisco Comín, eds. *The Rise of Fiscal States: A Global History, 1500–1914*. Cambridge: Cambridge University Press, 2015.
- Zahedieh, Nuala. *The Capital and the Colonies: London and the Atlantic Economy, 1660–1700*. Cambridge: Cambridge University Press, 2012.